

### REMARKS

Claim 103 has been canceled without prejudice. Applicants reserve the right to pursue claims similar or identical to claim 103 in one or more applications claiming priority to the instant application.

Claim 1 has been amended to recite a "semiconductor nanowire" instead of a "non-nanotube nanowire". Support can be found throughout the specification, for example, on page 17, line 22-page 18, line 25. Claim 1 has also been amended to recite a reaction entity positioned relative to the nanowire such that a chemical or biological interaction between the reaction entity and an analyte in the sample causes a detectable change in a property of the nanowire. Support for this amendment can be found throughout the specification, for example, on page, lines 9-14.

Claims 1-102 are now pending for examination, with claims 3-102 remaining withdrawn.

#### Rejections Under 35 U.S.C. §102(e) in view of Jin

Claims 1, 2 and 103 have been rejected under 35 U.S.C. §102(e) as being anticipated by Jin, U.S. Patent No. 6,286,226 ("Jin").

It is not seen where in Jin is there a disclosure or suggestion of a chemical or biological reaction entity positioned relative to the nanowire such that an interaction between the reaction entity and an analyte in the sample causes a detectable change in a property of the nanowire, as recited in claim 1, as amended. In Jin, detection of an analyte is achieved through a mechanical or "tactile" sensor, i.e., a nanowire that is bent when it comes into contact with an object. See, e.g., the abstract and Figs. 1A-1B. Accordingly, it is believed that claim is patentable in view of Jin, and it is respectfully requested that the rejection be withdrawn. Claim 2 depends from claim 1, and is believed to be allowable for at least the same reasons. Withdrawal of the rejection of claim 2 is also respectfully requested.

Claim 103 has been canceled. Thus, the rejection of claim 103 is now moot.

#### Rejections Under 35 U.S.C. §102(b) in view of Tiefenauer

Claims 1, 2, and 103 have been rejected under 35 U.S.C. §102(b) as being anticipated by Tiefenauer, et al., "Towards amperometric immunosensor devices," *Biosensors and Bioelectronics*, Vol. 12, No. 3, pp. 213-223, 1997 ("Tiefenauer").

It is not seen where in Tiefenauer is there a disclosure or suggestion of a semiconductor nanowire, as recited in independent claim 1. Tiefenauer discloses the use of nanostructured gold electrodes, which Tiefenauer considers to be a stable network of nanowires (page 214, left column). Even if the electrodes of Tiefenauer were to be considered nanowires, which the Applicants do not concede to be an accurate representation, it is noted that Tiefenauer does not suggest the use of semiconductor nanowires. Accordingly, it is believed that the rejection has been overcome, and it is respectfully requested that the rejection of claim 1 be withdrawn. Claim 2 depends from claim 1, and is believed to be allowable for at least these reasons. It is thus respectfully requested that the rejection of claim 2 be withdrawn.

Claim 103 has been canceled. Thus, the rejection of claim 103 is now moot.

#### Rejections Under 35 U.S.C. §102(b) in view of Padeste

Claims 1, 2, and 103 have been rejected under 35 U.S.C. §102(b) as being anticipated by Padeste, et al., "Modular Amperometric Immunosensor Devices," *Transducers '95-Euroensors IX, The Eighth International Conference on Solid-State Sensors and Actuators, and Euroensors IX*, Stockholm, Sweden, June 25-29, 1995 ("Padeste").

It is not seen where in Padeste is there a disclosure or suggestion of a semiconductor nanowire, as recited in independent claim 1. Padeste discloses the use of nanostructured gold electrodes deposited on an SiO<sub>2</sub> substrate, but does not suggest the use of semiconductor nanowires. Accordingly, it is respectfully requested that the rejection of claim 1 be withdrawn. Claim 2 depends from claim 1, and is believed to be allowable for at least the same reasons. Withdrawal of the rejection of claim 2 is also respectfully requested.

Claim 103 has been canceled. Thus, the rejection of claim 103 is now moot.

#### CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the undersigned at the telephone number listed below.

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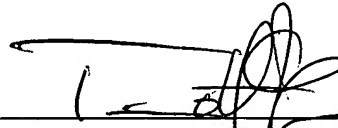
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If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,

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